

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	15145	(frank or franking or mail or mailing or postage or meter or metering or sort or sorting or route or routing) near5 (rf or radio or wireless)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 10:42
2	BRS	L2	314196	(net or network of lan or wan or communication or link or line or channel) near5 (rf or radio or wireless)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 10:42
3	BRS	L3	16847	(gateway or server) near5 (rf or radio or wireless)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 10:42
4	BRS	L6	882	3 near8 (frank or franking or mail or mailing or postage or meter or metering or sort or sorting or route or routing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 10:46
5	BRS	L8	638	1 same 6  <i>Scanned Ti, Ab, Kwic all</i>	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 10:48
6	BRS	L9	26	("5715164" or "4752950" or "5657689").pn. or ((@pd<="19710101" not @pd<="19470101") and (705/400).ccls.) <i>Scanned Ti all</i>	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	2005/03/20 11:48

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	US 5860058 A	19990112	Daniel; Brian Michael et al.	455/12.1	455/13.1; 455/427; 455/428; 455/445	13
2	DE 19847292 A	20000413	HOFESTAEDT, H et al.			4
3	US 20030083894 A1	20030501	Bell, Easton F. et al.	705/1	705/401	8
4	US 20040210544 A1	20041021	Shuey, Kenneth C. et al.	705/412		17

L 8 results

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	US 5715164 A	19980203	Liechti, deceased; Hans- Peter et al.	705/410	235/375; 235/381; 705/404	30
2	US 5657689 A	19970819	Lee; Daniel John	101/91	705/410	6
3	US 4752950 A	19880621	Le Carpentier; Marc	379/106.11	705/410	10

L9 results

DERWENT-ACC-NO: 2000-284437

DERWENT-WEEK: 200501

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TITLE: Radio communication system especially for railways - uses gateway computer, which switches radio connections for data transmission between vehicle, route elements and central station

INVENTOR: HOFESTAEDT, H; KENDELBACHER, D ; WATZLAWIK, G

PRIORITY-DATA: 1998DE-1047292 (October 7, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 59911109 G	December 23, 2004	N/A	000	H04L 012/00
DE 19847292 A1	April 13, 2000	N/A	004	H04Q 007/20
WO 200021243 A2	April 13, 2000	G	000	H04L 012/00
EP 1118185 A2	July 25, 2001	G	000	H04L 012/00
EP 1118185 B1	November 17, 2004	G	000	H04L 012/00
INT-CL (IPC):	G08C017/02, H04L012/00 , H04Q007/20			

ABSTRACTED-PUB-NO: DE 19847292A

EQUIVALENT-ABSTRACTS:

The system includes a gateway computer, which switches the radio connections for data transmission between vehicles, route elements and central station. The vehicles and the route elements are provided with radio terminals. The route elements can be provided with wired communication terminals. The vehicles are trains and the route elements are points, rail track barricades, level crossings, key locks.

Several trains can carry out simultaneous communication with one route element.

ADVANTAGE - Enables reliable data traffic via effective communication path with only one radio transmission channel between vehicles and route elements, which guarantee simultaneous communication with several route elements. Minimises system update and maintenance.

US-PAT-NO: 5860058

DOCUMENT-IDENTIFIER: US 5860058 A

TITLE: Method and apparatus for routing signals through a communication system having multiple destination nodes

DATE-ISSUED: January 12, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Daniel; Brian Michael	Phoenix	AZ	N/A	N/A
Leopold; Raymond Joseph	Tempe	AZ	N/A	N/A
Olds; Keith Andrew	Mesa	AZ	N/A	N/A

US-CL-CURRENT: 455/12.1, 455/13.1 , 455/427 , 455/428 , 455/445

ABSTRACT: A method and apparatus for routing signals through a system (10) which has multiple destination nodes (12, 14) assigns one or more unique carrier frequencies to each destination node (12, 14). When a signal is received (502) by a transceiver (12), the transceiver (12) evaluates (504) the carrier frequency of the signal, and determines (506) to which destination node (12, 14) that carrier frequency is assigned. The determination (506) is made using a table (200) which associates carrier frequencies to destination nodes (12, 14). The table (200) is created (304) and updated by a control facility (20) which distributes (306) the table (200) to the transceivers (12). Once the transceiver (12) determines (506) the destination node (12, 14), the transceiver (12) can route the signal toward that destination node (12, 14).

20 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

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Claims Text - CLTX (57): 19. A gateway for use in a communication system comprising multiple transceiver nodes which route a signal from a wireless communication unit to a destination device, the gateway comprising:

PGPUB-DOCUMENT-NUMBER: 20030083894  
 PGPUB-FILING-TYPE: new  
 DOCUMENT-IDENTIFIER: US 20030083894 A1  
 TITLE: Wireless mailroom having a gateway server to allow remote access  
 PUBLICATION-DATE: May 1, 2003  
 INVENTOR-INFORMATION:  

NAME	CITY	STATE	COUNTRY	RULE-47
Bell, Easton F.	Norwalk	CT	US	
Coffy, Jean-Hiram	Norwalk	CT	US	
Miller, Kenneth G.	Bethel	CT	US	
Norris, James R. JR.	Danbury	CT	US	
Triska, Cheryl Picoult	Monroe	CT	US	

 US-CL-CURRENT: 705/1, 705/401

**ABSTRACT:** A wireless mailing system that has a minimal number of interface cables between devices, while still maintaining full functionality, is easy to add devices to, and provides remote access for each device without having a dedicated telephone line for each device or having to transport each device to a telephone line is provided. A mailing system includes a plurality of devices, each of which is adapted to communicate with the other devices via a wireless communication link to form a local network. A gateway server can act as the master of the local network to coordinate communication between the devices in the local network, or alternatively, the devices in the local network can communicate directly with each other. Additionally, the gateway server allows remote access to the local network via a standard telephone network or other data network, such as, for example, the Internet.

----- KWIC -----

Detail Description Paragraph - DETX (6): [0016] As noted above, many devices in a typical mailing system need to conduct communications with a data center from time to time to update, refill and retrieve information. The system 10 according to the present invention simplifies such communications and also reduces the cost and labor involved. As shown in FIG. 1, gateway server 12 is coupled to a network 14, which may be, for example, a PSTN or the Internet. A data center 40 is also coupled to network 14, and can communicate with gateway server 12 via the network 14. Suppose, for example, a meter 16 needs to have postage funds refilled. The meter 16 will communicate with the gateway server 12, via a wireless communication. Gateway server 12 will then communicate with data center 40, via network 14, to request the refill. Data center 40 will provide the refill data to gateway server 12, which will then provide the refill data to meter 16 via a wireless communication. Similarly, suppose for example a rate change needs to be downloaded to a scale 18. The rate change will be sent from data center 40 to gateway server 12 via network 14, and then communicated from gateway server 12 to scale 18 via a wireless communication. Since all communications with the data center 40 are performed via gateway server 12, only gateway server 12 needs to have a telephone line or network connection, thus significantly reducing the number of telephone and/or network lines necessary. Additionally, in system 10 according to the

present invention in which wireless communications are made between the devices in local network 30 and gateway server 12, it is not necessary to physically transport any of the devices included in local network 30 to the telephone line or network connection to communicate with the data center 40, thereby further simplifying the operation of system 10 over conventional mailroom systems.

Claims Text - CLTX (32): 31. A method for invoking a service of a mailing device by a remote device, said mailing device belonging to a wireless mailing system, said method comprising the steps of: registering said mailing device with a gateway server, said registration being done via a wireless communication between said mailing device and said gateway server; creating a proxy for said registered mailing device and storing said proxy in said gateway server; establishing a communication between said remote device and said gateway server via a network; selecting a service associated with registered mailing device via said communication between said remote device and said gateway server; and invoking said selected service via said proxy by said remote device.

Claims Text - CLTX (33): 32. The method according to claim 31, wherein said wireless communication between said mailing device and said gateway server is a radio frequency communication.

PGPUB-DOCUMENT-NUMBER: 20040210544  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040210544 A1  
TITLE: Broadcast technology for an automatic meter reading system  
PUBLICATION-DATE: October 21, 2004  
INVENTOR-INFORMATION:  
NAME CITY STATE COUNTRY RULE-47  
Shuey, Kenneth C. Raleigh NC US  
Smith, Kathryn J. Raleigh NC US  
Lawrence, David C. Raleigh NC US  
Bragg, Arnold W. Raleigh NC US  
US-CL-CURRENT: 705/412

ABSTRACT: An automated meter reading system is provided. The system includes a host server interfaced to a plurality of nodes where each node communicates with a number of utility meters. The system selects a group of noninterfering nodes and uses an RF broadcast from the host server to initiate the reading of meters and the uploading of meter data provided by those meters to the nodes and, ultimately, to the host server. The system also has a number of gateways that communicate with a plurality of nodes, grouped to form sets of noninterfering gateways. In this embodiment, the system selects a set of noninterfering gateways and uses an RF broadcast from the host server to initiate the reading of meters and the uploading of meter data provided by those meters to the nodes and, ultimately, through the gateways to the host server. A method for using an outbound RF channel to automatically read meters is also provided.

----- KWIC -----

Abstract Paragraph - ABTX (1): An automated meter reading system is provided. The system includes a host server interfaced to a plurality of nodes where each node communicates with a number of utility meters. The system selects a group of noninterfering nodes and uses an RF broadcast from the host server to initiate the reading of meters and the uploading of meter data provided by those meters to the nodes and, ultimately, to the host server. The system also has a number of gateways that communicate with a plurality of nodes, grouped to form sets of noninterfering gateways. In this embodiment, the system selects a set of noninterfering gateways and uses an RF broadcast from the host server to initiate the reading of meters and the uploading of meter data provided by those meters to the nodes and, ultimately, through the gateways to the host server. A method for using an outbound RF channel to automatically read meters is also provided.

Summary of Invention Paragraph - BSTX (2): [0001] The present invention relates to automatic meter reading. More particularly, the present invention relates to an automated system for remotely monitoring a plurality of utility meters on command from a host server via an RF outbound broadcast.



DIALOG 20 MARCH 2005

- File 2:INSPEC 1969-2005/Mar W2 (c) 2005 Institution of Electrical Engineers
- File 9:Business & Industry(R) Jul/1994-2005/Mar 18 (c) 2005 The Gale Group
- File 15:ABI/Inform(R) 1971-2005/Mar 18 (c) 2005 ProQuest Info&Learning
- File 16:Gale Group PROMT(R) 1990-2005/Mar 21 (c) 2005 The Gale Group
- File 20:Dialog Global Reporter 1997-2005/Mar 20 (c) 2005 The Dialog Corp.
- File 35:Dissertation Abs Online 1861-2005/Feb (c) 2005 ProQuest Info&Learning
- File 65:Inside Conferences 1993-2005/Mar W2 (c) 2005 BLDSC all rts. reserv.
- File 99:Wilson Appl. Sci & Tech Abs 1983-2005/Feb (c) 2005 The HW Wilson Co.
- File 148:Gale Group Trade & Industry DB 1976-2005/Mar 21 (c)2005 The Gale Group
- File 160:Gale Group PROMT(R) 1972-1989 (c) 1999 The Gale Group
- File 256:TecInfoSource 82-2005/Feb (c) 2005 Info.Sources Inc
- File 275:Gale Group Computer DB(TM) 1983-2005/Mar 21 (c) 2005 The Gale Group
- File 347:JAPIO Nov 1976-2004/Nov(Updated 050309) (c) 2005 JPO & JAPIO
- File 348:EUROPEAN PATENTS 1978-2005/Feb W04 (c) 2005 European Patent Office
- File 349:PCT FULLTEXT 1979-2005/UB=20050317,UT=20050310 (c) 2005 WIPO/Univentio
- File 474:New York Times Abs 1969-2005/Mar 19 (c) 2005 The New York Times
- File 475:Wall Street Journal Abs 1973-2005/Mar 18 (c) 2005 The New York Times
- File 476:Financial Times Fulltext 1982-2005/Mar 19 (c) 2005 Financial Times Ltd
- File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13 (c) 2002 The Gale Group
- File 610:Business Wire 1999-2005/Mar 19 (c) 2005 Business Wire.
- File 613:PR Newswire 1999-2005/Mar 20 (c) 2005 PR Newswire Association Inc
- File 621:Gale Group New Prod. Annou.(R) 1985-2005/Mar 21 (c) 2005 The Gale Group
- File 624:McGraw-Hill Publications 1985-2005/Mar 18 (c) 2005 McGraw-Hill Co. Inc
- File 634:San Jose Mercury Jun 1985-2005/Mar 18 (c) 2005 San Jose Mercury News
- File 636:Gale Group Newsletter DB(TM) 1987-2005/Mar 21 (c) 2005 The Gale Group
- File 810:Business Wire 1986-1999/Feb 28 (c) 1999 Business Wire
- File 813:PR Newswire 1987-1999/Apr 30 (c) 1999 PR Newswire Association Inc

Set	Items	Description
S1	90391	(FRANK OR FRANKING OR MAIL OR MAILING OR POSTAGE OR METER OR METERING OR SORT OR SORTING OR ROUTE OR ROUTING) (5N) (RF OR RADIO OR WIRELESS)
S2	45017	(GATEWAY OR SERVER) (5N) (RF OR RADIO OR WIRELESS)
S3	1990 S2 (8N)	(FRANK OR FRANKING OR MAIL OR MAILING OR POSTAGE OR METER OR METERING OR SORT OR SORTING OR ROUTE OR ROUTING)
S4	1356	S1 (S) S3
S5	766	RD S4 (unique items) [Scanned ti,pd,kwic all]